

REMARKS

The final Office action of 30 March 2007 (Paper No. 20070327) has been carefully considered.

Listing of the Claims

Pursuant to 37 CFR §121(c), the claim listing, including the text of the claims, will serve to replace all prior versions of the claims, in the application.

Amendment of the Claims

Claims 21, 24, 29, 31, 37, 40 and 42 are amended in several particulars, as is discussed in the following paragraphs. Claims 28 and 30 are cancelled without prejudice or disclaimer of their subject matter. Thus, after entry of the present Amendment After Final, claims 21 through 27, 29 and 31 through 43 will be pending in the application. .

Basis for the Amendments of the Claims

Dependent claims 28 and 30 define the “second rests” as being movably mounted on rails. The features of claims 28 and 30 have already been thoroughly considered by the Examiner. These features are now incorporated into independent claims 21, 24, 37, 40 and 42. Consequently, it would be rather unlikely that incorporation of these features into independent claims 21, 24, 37, 40 and 42 would either raise new issues or require further consideration of the claims. Dependent claims 29 and 31 are amended to conform to the cancellations of claims 28 and 30.

Independent claim 21 is also amended to correct the syntax of “conveying” in line 9, an adjective already present elsewhere in claim 21, to substitute the article “a” for

“the” in line 4, and to correct the spelling of “movably” in line 15. None of these amendments raise new issues or require further consideration. Consequently, the entry of these amendment is permissible under 37 CFR §1.116(b) because their entry will remove possible objections to spelling, typographic errors or syntax, and thereby simplify the issues for purposes of appeal. Such action is respectfully urged.

Objections to the Specification and Drawings

The Examiner’s reconsideration and withdrawal of all previous objections to the specification and the drawings, as well as all previous rejections under the first and second paragraphs of 35 U.S.C. §112, are noted with appreciation.

Examiner’s Response to Arguments

In Paper No. 20070327 the Examiner wrote that,

“Applicant argues Muller does not disclose the limitations of claim 21, namely, “wherein the conveyor device in the transfer region (or conveyor assembly) is arranged adjacent to a collection drum end of the collection drum”. In response, adjacent is defined as “lying near, close, or contiguous”. As shown in figure 1, conveyor device (40) is arranged adjacent to a collection drum end of the collection drum (14)... .”

This “response to arguments” improperly fails to follow the mandate of 35 U.S.C. §103(a) by considering the “differences between the subject matter sought to be patented and the prior art ...” and Applicant’s “subject matter as a whole” More specifically, Applicant’s 21 defines, *inter alia*, Applicant’s:

“conveyor device comprising a revolving conveyor ... and arranged transversely to the conveying direction, with the conveyor device in the transfer region arranged adjacent to an end of the collection drum to enable carriage of the printed products to be transferred from an end to the conveyor device or vice versa, and the second rests being movably propelled along the conveyor path independently from the collection drum.”

Glaringly absent from the Examiner's *Response To Arguments* is any averment that Applicant's Müller '278 patent either teaches or suggests the “a conveyor device comprising a revolving conveyor ... and the second rests being movably propelled along the conveyor path independently from the collection drum” of Applicant's claim 21. The Examiner is respectfully urged to reconsider the *Response To Arguments*.

Claim Rejections-35 U.S.C. §102

I. Claims 21-23 are rejected under 35 U.S.C. §102(b) as being anticipated by Muller USP 5,562,278.

In support of this rejection, the Examiner asserted that:

Müller discloses a device for collecting and processing folded printed products comprising:

- a collection drum (14) rotatably drivable about its drum axis and comprised of first rests (18) with first saddles (20)
- the first rests (18) being uniformly distributed over the circumference and extending in their longitudinal extension parallel to the drum axis (C3/L33-36), as well as conveyor elements (34) for conveying the printed products on the first saddles (20) in the axial direction along the firsts rests (18)
- a conveyor device (40) comprising a revolving conveyor (40) having an upper side and a lower side (fig.7)
- a conveyor path with a conveyor direction (u) which at least in a transfer region deviates from the axial direction

- second rests (42) movable in the conveyor path, and second saddles (52) arranged distanced to one another and arranged transversely to the conveying direction
- the conveyor device in the transfer region arranged adjacent to an end of the collection drum to enable carriage of the printed products to be transferred from an end to the conveyor device or vice versa (C11/L5-7)
- the second rests (42) being movable propelled along the conveyor path independently from the collection drum
- at least one station (88") positioned radially on an inside of the revolving conveyor (40), disposed to modify printed products carried by the revolving conveyor
- a securement system (C 10/L65-C11/L5) disposed along the lower side hindering printed products from escaping from carriage with the second rests (42)

Applicant respectfully traverses this rejection for the following reasons.

First, Applicant's claim 21 defines, *inter alia*, Applicant's:

“a conveyor device comprising a revolving conveyor ... and arranged transversely to the conveying direction, with the conveyor device in the transfer region arranged adjacent to an end of the collection drum to enable carriage of the printed products to be transferred from an end to the conveyor device or vice versa, and the second rests being movably propelled along the conveyor path independently from the collection drum.”

Glaringly Applicant's Müller '278 patent either teaches or suggests the “a conveyor device comprising a revolving conveyor ... and the second rests being movably propelled along the conveyor path independently from the collection drum” of Applicant's claim 21. As mentioned in the **MPEP §2131**, “a claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference.” *Verdegaal Bros. v. Union Oil Co. of California*, 814 F.2d 628,

631, 2 USPQ2d 1051, 1053 (Fed. Cir. 1987). Every element must be literally present, arranged as in the claim. *Richardson v. Suzuki Motor Co.*, 868 F.2d 1226, 9 USPQ2d 1913, 1920 (CAFC 1989). The identical invention must be shown in as complete detail as is contained in the patent claim. *Id.*, “All words in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 165 USPQ 494, 496 (CCPA 1970), and MPEP 2143.03.

Here, the utter failure of the prior art to teach all of the details defined by Applicant’s claims 21 through 23, establishes by the overwhelming evidence of record that claims 21 through 23 are not anticipated by the Müller ‘278 patent. The Examiner is respectfully urged to reconsider, and to withdraw this rejection.

Claim Rejections-35 U.S.C. §103

I. Claims 24, 25, 30-34, 36, 37, 39, 40, 42 are rejected under 35 U.S.C. §103(a) as being unpatentable over Muller USP 5,562,278 in view of Meier USP 5,657,978.

Claims 24, 25, 30 through 34, 36, 37, 39, 40, 42 are rejected under 35 U.S.C. §103(a) as being rendered obvious, and therefore unpatentable, over the Examiner’s proposed combination of Müller ‘278 modified according to Meier, U.S. Patent No. 5,657,978.

In support of this rejection, the Examiner wrote that,

Müller ‘278 discloses a device for collecting and processing

folded printed products comprising:

- a collection drum (14) comprising a terminal end and a plurality of first rests (18) bearing first saddles (20)
- the first rests (18) being uniformly distributed over the circumference and extending in their longitudinal extension parallel to the drum axis (C3/L33-36), as well as conveyor elements (34) for conveying the printed products on the first saddles (20) in the axial direction along the firsts rests (18)
- a conveyor device (40) comprising a revolving conveyer, or a carriage unit, having an upper side and a lower side (fig.1)
- a conveyor path with a conveyor direction (u) which at least in a transfer region deviates from the axial direction
- second rests (42) bearing second saddles (52) movable in the conveyor path, and the second saddles arranged distanced to one another and arranged transversely to the conveying direction
- the second rests (42) of a side opposite the second saddles (52) are supported on at least one rail (C10/L66 - C11/L4).
- the second rests (42) are movably supported on rails (72)
- the conveyor device accommodating within the transfer region a transfer of printed products between the first rests at the collection drum terminal end and the second rests of the conveyor (see figures)
- the second rests (42) being movable propelled along the conveyor path independently from the collection drum
- the conveyor device (40) accommodates operating conditions with selected ones of binding stations, wire saddle stitching stations (82), adhesion stations (74), and an additional collection station (90, 98) disposed to directly modify the printed products while the printed products are carried by the conveyor device on an upper side (figs.5, 7) of the conveyor device
- the second saddles (52) of the second rests (42) in the complete conveyor path (fig. 2) are movable in parallel

with a predefined, equal distance to one another and conveyor devices (46') disposed to cooperate with the second rests (42) close to the saddle (52)

- the working stations (74, 82, 90, 92, 94, 96, 98, 100, 102, 112, 28, 30, 88, 88', 88") could possibly be allocated to the conveyor (40) means in an exchangeable sequence (C9/L10-20)
- the conveyor (40) means is designed as a revolving conveyor with an upper and a lower side with an essentially horizontal conveyor path (fig.1)

Müller does not expressly disclose the conveyor device being detachable from the collection drum and rotatably drivable independently of the conveyor drum. Meier teaches the conveyor device being detachable from the collection drum and rotatably drivable independently of the conveyor drum for the purpose of allowing portion to rotate at different speeds (C4/L50-63).

Applicant respectfully traverses this rejection for the following reasons.

The examiner cites column 4, lines 50 to 63 of the Meier Patent, in order to support this rejection of Applicant's Claims 24, 25, 30 to 34, 36, 37, 39, 40 and 42 . The cited parts of the Meier reference disclose that a first and a second part of a drum may be driven by different drive elements and that the drum may be subdivided into three or more portions. For parallel operation it is not necessary to drive the two portions 3, 4 of the processing drum 2 synchronously, in particular via a common shaft 21. The two portions 3, 4 may also be driven by different elements. Different rotation speeds of the two portions 3, 4 are also possible. It will be recognized that the drum 2 may also be subdivided into three or more portions, by providing corresponding further product-removal stations and product feeding stations at the respective end regions of the individual portions.

Even assuming *arguendo* that the Examiner's proposed combination does teach detachable portions, it has to be kept in mind that said drums are quite large and heavy but, because these drums must support components that are capable of handling the delicacy of thin as well as slick paper products, the drums are themselves very delicate devices. It is disclosed in Meier '978 that the two portions have to be located with a certain angular positional relation to be in alignment with one another.

In series operation, shown in FIG. 2 of the Examiner's proposed combination including Meier '978, it is essential that the two portions 3, 4 of the processing drum 2 are either *(a)* fixedly connected to one another by mechanical couplers spanning gap 22, which is formed between the two portions 3, 4 on their respective end sides, or *(b)* if such a connection is not provided, the two portions 3, 4 are simultaneously activated by two synchronously running drives. In this latter arrangement, the two portions 3, 4 must be located in such an angular position with respect to one another that the saddle-like rests 6, 6' of the two portions 3, 4 are in alignment with one another.

After alignment, the drum portions according to Meier are no longer moved in relation to each other. The two drum portions 3, 4 of Meier are not considered to be detachable. The bulky and sensitive drum portions are not combined and rearranged at will. After setup, the drums might be used to produce one complex product or two simpler products, and might even be run at different speeds – if necessary; however they are not detached (*i.e.*, portable or movable away from one another). Therefore, in point of fact, the drum portions of the Examiner's proposed combination including Meier '978

are not detachable.

Furthermore the portions disclosed by the Examiner's proposed combination including Meier '978 are drum portions and not a drum and a detachable conveyor device.

More specifically, Claim 24 defines, among other features,

“a **collection drum** comprising a terminal end and a plurality of first rests bearing first saddles, ..., the collection drum being rotatably drivable about the axis of the collection drum; and

a **conveyor device** being detachable from the collection drum and rotatably drivable independently of the conveyor drum, and when positioned in operationally cooperative proximity to the terminal end of the collection drum, enabling the end of the collection drum to define a transfer region of the conveyor device, the conveyor device comprising second rests movable along the conveyor path bearing second saddles arranged spaced-apart from one another and arranged transversely to the conveying direction to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction, the conveyor device accommodating within the transfer region a transfer of the printed products between the first rests at the collection drum terminal end and the second rests of the conveyor device.”

The terms *collection drum* and *conveyor device* are art recognized terms which can not be confused with *processing drum 2* which is taught by the Examiner's proposed combination as comprising “a first portion 3 and a second portion 4” disposed around “a cylindrical core portion 5.” The Examiner's attention is kindly invited to note that Muller '278 also defines a *processing drum 14* integrated with a central *circulating conveyor 40*. Other references of record such as Honnegar '014 U.S. Patent No. 5.324.014 and the corresponding EP-A-0550828 and US. Patent Nos. 5.052.667,

5.052.666 and 4.981.291 each define a *processing drum*. In contradistinction, as defined by Muller '278, "a circulating *conveyor 40* (as distinguished from a belt *conveyor 56*) "functions to guide the printed products 10 which have been fed to it from the seeding section 22.3 (in the conveying direction F) away from one section of the processing drum 14 [in a direction of arrow U] into the respective following section thereof." In the defining language of claim 24,

"a **conveyor device** being detachable from the collection drum and rotatably drivable independently of the conveyor drum, and when positioned in operationally cooperative proximity to the terminal end of the collection drum, enabling the end of the collection drum to define a transfer region of the conveyor device, the conveyor device comprising second rests movable along the conveyor path bearing second saddles arranged spaced-apart from one another and arranged transversely to the conveying direction to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction, the conveyor device accommodating within the transfer region a transfer of the printed products between the first rests at the collection drum terminal end and the second rests of the conveyor device."

This is not what is taught by the Examiner's proposed combination which remarkably lacks, among other features of Applicant's claim 24, any carriage "in a direction of arrow U", or in the language of claim 24,

"a **conveyor device** ... detachable from the collection drum ... to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction"

It is important for the Examiner to appreciate that with a *processing drum*, such as is taught by Müller '278 or by Meier '978:

- in “existing [*processing drum*] systems comprising, for example, only one *processing drum* portion can be readily expanded to a system comprising a plurality of *processing drum* portions.”¹
- with Meier ‘978, “the inner-part products are not only collected, as is shown in FIG. 1, but are also at least in part, inserted or collated.”²

In neither the Examiner’s proposed combination of Müller ‘278 modified by Meier ‘978, nor in either Müller ‘278 or Meier ‘978 taken individually, is there any ability to provide Applicant’s:

“*conveyor device* being detachable from the collection drum and rotatably drivable independently of the conveyor drum, and when positioned in operationally cooperative proximity to the terminal end of the collection drum, enabling the end of the collection drum to define a transfer region of the conveyor device, the conveyor device comprising second rests movable along the conveyor path bearing second saddles arranged spaced-apart from one another and arranged transversely to the conveying direction to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction, the conveyor device accommodating within the transfer region a transfer of the printed products between the first rests at the collection drum terminal end and the second rests of the conveyor device”

simply because with *processing drums* as taught by both the Examiner’s proposed combination of Müller ‘278 as modified by Meier ‘978, as well as by both Müller ‘278 and Meier ‘978 taken individually,

¹ Meier, column 5, lines 66 and 67.

² Meier, column 6, lines 39 and 40.

“the product which is joined together [while carried by the *processing drum*] in this manner is then transported further in the direction of the arrow F ...”

It must also be noted that the “arrow F” taught by Meier ‘978 is parallel to the “arrow F” taught by Müller ‘278; and that these arrows F of both Müller ‘278 and of Meier ‘978 are both oblique, or substantially perpendicular to Applicant’s *conveyor direction F*,³ or, in the language of Applicant’s claims,

“to the conveying direction to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction...”

No amount of alteration or modification of the primary reference will produce anything other than a plurality of *processing drums* as taught by both the Examiner’s proposed combination of Müller ‘278 as modified by Meier ‘978. This conclusion is consistent with Meier ‘978’s teaching of the two portions 3, 4 of processing drum 2.

More telling than the foregoing deficiencies in the Examiner’s proposed combination, nothing in Paper No. 20070327 explains even vaguely how the various *processing drums* of the Examiner’s proposed combination of Müller ‘278 as modified by Meier ‘978 might be altered or adjusted to transport,

“the product which is joined together [while carried by the *processing drum*] in this manner is then transported further in the direction of the arrow F ...”

³ See, for example, paragraph [0043], page 15, line 13 of Applicant’s original specification, together with Figures 1, 4 and 5.

in any direction even similar to Applicant's *conveyor direction F*,⁴ or, in the language of Applicant's claims,

“to the conveying direction to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction... .”

This deficiency in the Examiner's proposed combination can not be corrected by the presence of *circulating conveyor 40* taught by Müller '278, for all of the reasons already of record. It should be noted that *gripper chain 20* disclosed in Meier should not be confused with drum portions or the conveyor device according to the present invention.

Paper No. 200703327 however, seeks to avoid compliance with the express dictate of 35 U.S.C. §103(a) that before a conclusion of obviousness can be made, “the differences between the subject matter sought to be patented and the prior art” must be identified and “the subject matter as a whole” must be found to have been obvious at the time the invention was made to a person of ordinary skill in the art, by failing to identify those *differences* and by ignoring the subject matter of Applicant's claims *as a whole*. In order to make a *prima facie* demonstration of obviousness under 35 U.S.C. §103(a), “all the elements of” the pending claims must be “accounted for in the prior art relied upon in

⁴ See, for example, paragraph [0043], page 15, line 13 of Applicant's original specification, together with Figures 1, 4 and 5.

this record.”⁵ The Examiner argues that Meier ‘978 “teaches [that] the *conveyor device*⁶ being detachable from the *collection drum* and rotatingly drivable independently of the *conveyor drum*⁷ for the purpose of allowing portion [*sic*] to rotate at different speeds.” The overwhelming evidence of record however, demonstrates that Meier ‘978 (1) fails to use the term *conveyor device*⁸, (2) fails to teach a *conveyor device*⁹ being detachable from the *collection drum*, and (3) fails to teach a *conveyor device*¹⁰ being detachable from the *collection drum* and rotatingly drivable independently of the *conveyor drum*.¹¹

Moreover, no feature, teaching or technique taught by the secondary reference, Meier ‘978 might be applied to modify the primary reference in order to make a *prima*

⁵ *In re John B. Sullivan, et al.*, ____ F.3d ____, ____ U.S.P.Q.2d ____ (Fed. Cir. 2007).

⁶ Paper No. 20070327 fails to identify any teaching of a *conveyor device* by Meier ‘978.

⁷ Paper No. 20070327 does not explain what a *conveyor drum* is. This is not an art recognized term. Moreover, *product-removal stations 18, 18’* of Meier ‘978 do not constitute a *conveyor drum*.

⁸ Paper No. 20070327 fails to identify any teaching of a *conveyor device* by Meier ‘978.

⁹ Paper No. 20070327 fails to identify any teaching of a *conveyor device* by Meier ‘978.

¹⁰ Paper No. 20070327 fails to identify any teaching of a *conveyor device* by Meier ‘978.

¹¹ Paper No. 20070327 does not explain what a *conveyor drum* is. This is not an art recognized term. Moreover, *product-removal stations 18, 18’* of Meier ‘978 do not constitute a *conveyor drum*.

facie showing of obviousness as is required to demonstrate non-patentability under 35 U.S.C. §103(a) as when “a technique [*sic*, that] has been used to improve one device, and a person of ordinary skill in the art would recognize that it would improve similar devices in the same way, using the technique is obvious unless its actual application is beyond his or her skill.”¹² Accordingly, this rejection fails to make a *prima facie* showing of obviousness, and must be withdrawn.

To reiterate, The combination of Müller and Hantsch does therefore not result in a device according to the newly restricted claim of the pending application. Claims 24, 25, 30 to 34, 36, 37, 39, 40 and 42 are rejected by the Examiner based on the combination of U.S. Patent No. 5,562,278 to Müller and the newly cited Ferag Patent U.S. Patent No. 5,657,978 (Meier *et al.*). The Examiner cites column 4, lines 50 to 63 of Meier *et al.* ‘978 in order to support his rejection. The cited parts of Meier *et al.* ‘978 disclose that a first and a second part of a drum may be driven by different drive elements and that the drum may be subdivided into three or more portions.

¹² *KSR International Co. v. Teleflex Inc.*, 550 U.S. ____ (2007), as applied in *In re John B. Sullivan and Findlay E. Russell*, ____ F.3d. ____, ____ U.S.P.Q.2d ____ (Fed. Cir. 2007).

50 ~~processing drum 2~~

For parallel operation, it is not necessary to drive the two portions 3, 4 of the processing drum 2 synchronously; in particular via a common shaft 21. The two portions 3, 4 may also be driven by different *drive* elements. Different rotational speeds of the two portions 3, 4 are also possible.

It will be recognized that the drum 2 may also be subdivided into three or more portions, by providing corresponding further product-removal stations and product-feeding stations at the respective end regions of the individual portions.

This reference disclosure does not teach detachable portions. It has to be kept in mind that said drums are quite large and heavy but very delicate devices. It is disclosed in Meier *et al.* '978 that the two portions have to be located in a certain angular position to be in alignment with one another.

In *scrim* operation, shown in FIG. 2, it is essential that the two portions 3, 4 of the processing drum 2 are either fixedly connected to one another by mechanical means via the gap 22, which is formed between them on the end sides, or if such a connection is not provided are activated by two synchronously running drives. In this arrangement, the two portions 3, 4 must be located in such an angular position with respect to one another that the saddle-like rests 6, 6' of the two portions 3, 4 are in alignment with one another.

After alignment, the drum portions according to Meier *et al.* '978 are no longer moved in relation to each other. Applicant of the present application, the proprietors of Meier *et al.* '978 have confirmed that the drum portions of Meier *et al.* '978 are not considered to be detachable. The bulky and sensitive drum portions are not combined and rearranged at will. After setup, the drums might be used to produce one complex product or two simpler products, and might even be run at different speeds - if necessary,

however they are not detached (*i.e.*, moved away from one another). Therefore, the drum portions are not detachable. Furthermore, the portions disclosed by Meier *et al.* '978 are drum portions and not a drum and a detachable conveyor device. Accordingly, this rejection may not be maintained. Its withdrawal is respectfully urged.

II. Claims 26, 35, 38, 41, 43 are rejected under 35 U.S.C. §103(a) as being unpatentable over Muller USP 5,562,278 in view of Mowry USP 4,641,825.

Claims 26,35,38,41,43 are rejected under 35 U.S.C. §103(a) as being rendered obvious, and unpatentable, over the Examiner's proposed combination of Müller '278 modified accordingly to Mowry, U.S. Patent No. 4,641,825. Applicant respectfully traverses this rejection for the following reasons.

Paper No. 20070327 argues in support of this rejection, that:

Müller discloses all the limitations of the claims, but does not expressly disclose bending elements integrated with the second rests. In fact, Muller does not disclose that the staples are bent at all.

Mowry teaches bending elements (72) integrated with rests (13) for the purpose of bending the staples provided by a stapling apparatus to prevent the staples from falling out of a bound printed product as is commonly known in the art. It would have been obvious for a person of ordinary skill in the art at the time of the applicant's invention to utilize bending elements integrated with the second rests, as taught by Mowry, in the device of Müller, for the purpose of bending the staples provided by a stapling apparatus to prevent the staples from falling out of a bound printed product.

This conclusion is unsupported by substantial evidence of record.

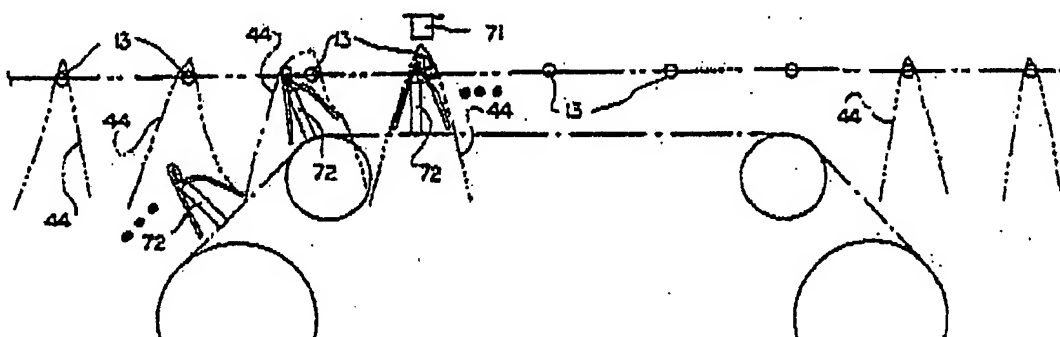
In paragraph 6 of Paper No. 20070327 the Examiner rejects present claims 26, 35,

38, 41 and 43 in view of the proposed combination Müller modified according to US 4641825 (Mowry '825). Applicant notes that contrary to the assertions set forth in Paper No. 20070327, the Examiner's proposed combination incorporating Mowry '825 does not disclose bending elements integrated with second rests 13. As a matter of fact, as is demonstrated by the reproduction of Figure 5b of Mowry '825, bending elements 72 in the Examiner's proposed combination are completely separate from the second rests 13, comprise a separate conveyor, and only interact with second rests 13 of Mowry '825 by lifting the object workpieces from second rests 13 before stapling.

In contradistinction, claim 26, by way of example, defines a structure comprised of:

bending elements integrated with the second rests, and at least one stapling apparatus operationally aligned with the conveyor assembly as a working station operationally engaging the bending elements.

The combination of the teachings of Muller and Mowry does not therefore, result in a solution as claimed in present claims 26, 35, 38, 41 and 43.



III. Claims 27, 28 and 29 (see paragraphs 5, 6) are rejected under 35 U.S.C. §103(a) as being unpatentable over Muller USP 5,562,278 (in view of Mowry USP 4,641,825; see paragraph 6) (further) in view of Hansch USP 5,172,897.

Claims 27, 28, and 29 (see ¶'s 5,6 of Paper No. 20070327) are rejected under 35 U.S.C. 103(a) as being rendered obvious and unpatentable over the Examiner's proposed combination of Müller '278 modified according to the newly cited Mowry '825 and Hansch, U.S. Patent No. 5,172,897. Applicant respectfully traverses this rejection for the following reasons.

In support of this rejection, the Examiner wrote:

Müller discloses all the limitations of the claims, but does not expressly disclose that the stapling apparatus is movably mounted on a rail guided approximately parallel to the conveyor path.

Hansch teaches a stapling apparatus (28) that is movably mounted on a rail (26) guided approximately parallel to the conveyor path for the purpose of permanently assigning to a stapler head to each support allowing the stapling heads of a stapling head arrangement to be mutually offset in the longitudinal direction of the supports. It is thus possible, for example, for each second stapling head to be slightly offset in relation to the other stapling heads arranged in a plane. All the staples do not then come to be located above one another during stacking of the stapled sheets (C15/L1-15).

It would have been obvious for a person of ordinary skill in the art, at the time of the applicant's invention to modify Müller by utilizing a stapling apparatus that is movably mounted on a rail guided approximately parallel to the conveyor path, as taught by Hansch, in the device of Müller, for the purpose of permanently assigning to a stapler head to each support allowing the stapling heads of a stapling head arrangement to be mutually offset in the longitudinal direction of the supports. It is thus possible, for example, for each second stapling head to be slightly offset in relation to the other stapling heads arranged in a plane. All the staples do

not then come to be located above one another during stacking of the stapled sheets.

As was already mentioned in these remarks, upper strand 72 of Müller '278 identifies the upper strand of the *circulating conveyor* 40. (See, for example, Müller '278: Figure 5 and column 7, lines 8 ff.). The proposed combination of Müller '278 or Hantsch '897 fails to remedy such deficiencies in Müller '278 as In neither the Examiner's proposed combination of Müller '278 modified by Meier '978, nor in either Müller '278 or Meier '978 taken individually, is there any ability to provide Applicant's:

“*conveyor device* being detachable from the collection drum and rotatably drivable independently of the conveyor drum, and when positioned in operationally cooperative proximity to the terminal end of the collection drum, enabling the end of the collection drum to define a transfer region of the conveyor device, the conveyor device comprising second rests movable along the conveyor path bearing second saddles arranged spaced-apart from one another and arranged transversely to the conveying direction to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction, the conveyor device accommodating within the transfer region a transfer of the printed products between the first rests at the collection drum terminal end and the second rests of the conveyor device”

simply because with *processing drums* as taught by both the Examiner's proposed combination of Müller '278 as modified by Meier '978, as well as by both Müller '278 and Meier '978 taken individually,

“the product which is joined together [while carried by the *processing drum*] in this manner is then transported further in the direction of the arrow F”

It must also be noted that the “arrow F” taught by Meier '978 is parallel to the “arrow F”

taught by Müller '278; and that these arrows F of both Müller '278 and of Meier '978 are both oblique, or substantially perpendicular to Applicant's *conveyor direction F*,¹³ or, in the language of Applicant's claims,

“to the conveying direction to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction... ”

No amount of alteration or modification of the primary reference will produce anything other than a plurality of *processing drums* as taught by both the Examiner's proposed combination of Müller '278 as modified by Meier '978. This conclusion is consistent with Meier '978's teaching of the two portions 3, 4 of processing drum 2.

More telling than the foregoing deficiencies in the Examiner's proposed combination, nothing in Paper No. 20070327 explains even vaguely how the various *processing drums* of the Examiner's proposed combination of Müller '278 as modified by Meier '978 might be altered or adjusted to transport,

“the product which is joined together [while carried by the *processing drum*] in this manner is then transported further in the direction of the arrow F ...”

in any direction even similar to Applicant's *conveyor direction F*,¹⁴ or, in the language of Applicant's claims,

¹³ See, for example, paragraph [0043], page 15, line 13 of Applicant's original specification, together with Figures 1, 4 and 5.

¹⁴ See, for example, paragraph [0043], page 15, line 13 of Applicant's original specification, together with Figures 1, 4 and 5.

“to the conveying direction to define a conveyor path with a conveyor direction able to deviate in the transfer region from the axial direction... .”

This deficiency in the Examiner's proposed combination can not be corrected by the presence of *circulating conveyor 40* taught by Müller '278, for all of the reasons already of record. It should be noted that *gripper chain 20* disclosed in Meier should not be confused with drum portions or the conveyor device according to the present invention.

As an aside, Müller '278 neither discloses nor suggests the use of rails to support and guide the second rests. The rails according to the present invention are structures which are realized in addition to the strand of the circulating conveyor as known from Müller '278, Hantsch discloses collecting devices deviating from the drum form, Figure 4 of Hantsch shows a side view of such an apparatus, which might have a certain resemblance to the “conveyor device” of the present invention, it has to be noted that the apparatus of Figure 4 is not a *conveyor device*, but is the equivalent of the collection drum. Hantsch does not disclose the use of rails to support and guide the second rests. Hantsch teaches that the collector conveyor 46 has a tension element 50, which is led around two mutually spaced deflecting wheels. The wheels are merely indicated in the drawing with their axes of rotation 48 which extend essentially horizontally. The tension element supports 14 are arranged on the tension element 50 at specific spacings behind one another and extending parallel to one another and perpendicular to the direction of rotation. It is further described in Hantsch, that the embodiment of the apparatus

represented in Fig. 4 for collecting folded printed sheets 20 has a collector conveyor 46 such as is described in the EP Patent Application 89,106,108.7 or in the corresponding U.S. patent application No, 07/365,616 or with a similar construction in EP Patent Specification 0,095,603 or corresponding U.S. Pat. No. 4,489,930, None of said references teach a rail support for the second rests of the conveyor devices, but all describe chain conveyors comprising unsupported conveyor chains.

In contrast to the examiners opinion set forth in Paragraph 7 of Paper No. 20070327, neither Müller '278 nor Hantsch discloses devices with second rests movably supported on rails. In contrast to the examiners opinion set forth in Paragraph 7 of Paper No. 20070327, neither Müller '278 nor Hantsch discloses devices with second rests movably supported on rails. The combination of Muller and Hantsch does therefore not result in a device according to the newly restricted claim of the pending application.

Amendments to the Claims

Claims 28 and 30 are incorporated into parent claim 24, and to independent claim 21, 37, 40 and 42. In consideration of these amendments, the Examiner's attention is invited to note that,

"Said feature (*i.e.*, said rail) is disclosed in some detail paragraph [0024] of the description as originally filed:

In a particularly preferred embodiment form the second rests on their side opposite to the saddles are movably supported on at least one rail. In a further preferred embodiment form the second rests additionally in their half lying close to the saddle on their side distant to the collection drum are movably

supported on or in a rail, which increases the stability. The support on or in the rails may be realized most simply using rollers or carriages running in or on the rails. In such a case the conveyor is advantageously engage the rollers or carriages of the rests. With rail-supported second rests one may particularly simply arrange further working stations such as inserting stations, adhering stations, further collection stations and many others to the conveyor path, In this manner the conveyor means may be used particularly efficiently.

Additionally, a preferred embodiment comprising a pair of rails (28) and a further rail (28') is described in paragraphs [0042] and [0044].

Adjacent to the drum end 24 there is positioned a frame 26 which carries a conveyor means in the form of a revolving conveyor means 30'. The revolving conveyor means 30' comprises single part or multi-part rails which in each case form a closed ring and are fastened on the frame 26. In the example shown here there are provided two rails 28, 28' lying diagonally opposite one another, wherein the radial outer rail 28' is arranged on that side of the conveyor means 30 distant to the collection drum 14. ... The rails 28, 28' define an annular conveyor path 31 which is illustrated in Fig. 1 radially on the outside by a dot-dashed line. Second rests 32 are arranged on this conveyor path 31 behind one another seen in the conveying direction F and parallel to one another.

The second rests 32 in the example shown here on their inner radial side distant to the second saddles 34, using small carriages 38, are guided in two rails 28 arranged parallel to one another of which in each case only one may be seen in the drawings. The rails 28 consist essentially of a hollow profile 40 with a rectangular cross section which radially on the outside is provided with a guiding groove through which the carriages are connected to the rests 32 via a mount 42. The distance of the two rails 28 to one another corresponds essentially to the longitudinal extension of the second rests 32.

Paragraph [0046] further describes, that:

The rails 28, 28' form deflection means 44, 44' around the axes 36, 36' and thus connect the lower side [belt face] with the upper side [belt face] of the revolving conveyor means 30'.

These rejected device claims define features such as those directed towards the (a) detachability of the conveyor device, and the (b) the second rests movably supported on rails. The combination of Muller and Hantsch does therefore not result in a device constructed according to the definitions set forth by these pending claims, as may be seen by examination of the following reproduction of Figure 4.

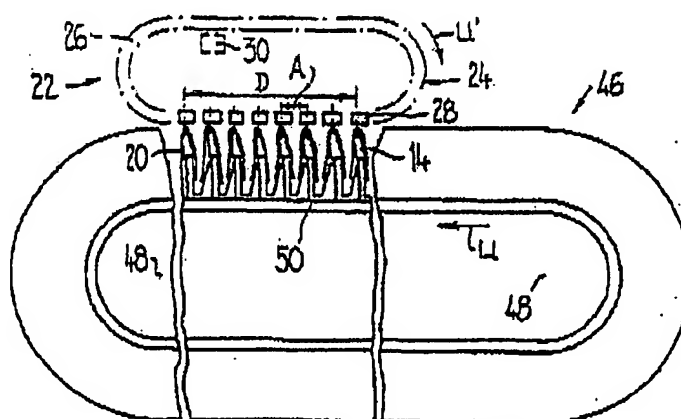


Fig.4

Entry of this Paper Under 37 CFR §1.116(b)

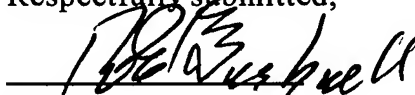
Dependent claims 28 and 30 define the “second rests” as being movably mounted on rails. The features of claims 28 and 30 have already been thoroughly considered by the Examiner. These features are now incorporated into independent claims 21, 24, 37, 40 and 42. Consequently, it would be rather unlikely that incorporation of these features into independent claims 21, 24, 37, 40 and 42 would either raise new issues or require further consideration of the claims. Dependent claims 29 and 31 are amended to conform to the cancellations of claims 28 and 30.

Independent claim 21 is also amended to correct the syntax of “conveying” in line 9, an adjective already present elsewhere in claim 21, to substitute the article “a” for “the” in line 4, and to correct the spelling of “movably” in line 15. None of these amendments raise new issues or require further consideration. Consequently, the entry of these amendments is permissible under 37 CFR §1.116(b) because their entry will remove possible objections to spelling, typographic errors or syntax, and thereby simplify the issues for purposes of appeal. Such action is respectfully urged.

In view of the above, it is submitted that the claims of this application are in condition for allowance, and early issuance thereof is solicited. Should any questions remain unresolved, the Examiner is requested to telephone Applicant's attorney.

A Notice of Appeal and a Petition for a three-month extension of time, and their respective requisite fees are concurrently submitted with this Amendment After Final. Should the Notice become lost, the Commissioner is requested to treat this paragraph as a Notice of Appeal, should the Petition become lost, the Commissioner is requested to treat this paragraph as a petition for an extension of time, and should the check become lost, be deficient in payment, or should other fees be incurred, the Commissioner is authorized to charge Deposit Account No. 02-4943 of Applicant's undersigned attorney in the amount of such fees.

Respectfully submitted,



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